ಬೃಹತ್ ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ
Bruhat Bengaluru Mahanagara Palike

Name of Work: Improvements to roads and drains at Hegadenagara Surrounding Area in Ward No.06 Byatarayanapura Sub Division

DETAILED ESTIMATES

Estimated Cost
Rs. 100.00 Lakh

Office of the
Executive Engineer
Byatarayanapura DIVISION
Bruhat Bangalore Mahanagara Palike
Bangalore

BRUHAT BANGALORE MAHANAGARA PALIKE

Name of Work: Improvements to roads and drains at Hegadenagara Surrounding Area in Ward No.06 Byatarayanapura Sub Division

Sl No	Description of work	Unit	No	Length m	Breadth m	Depth m	Quantity	Rate in Rs	Amount in Rs
1	KSRRB 300 - Excavation for road, drains and similar works KSRRB 300-1. Earthwork excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5 m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete as per specifications. MORTH / Chapter 3 (P.No-143, I.No-								
	For RCC Drain	Cum							
	Hegdenagar								
	For Culvert		4	8.50	2.00	1.05	71.40		
	Flagging course damaged reaches								
	Desilt		1	40.00	0.50	0.35	7.00		
			1	35.00	0.50	0.35	6.13		
			1	32.00	0.50	0.35	5.60		
			1	28.00	0.50	0.35	4.90		
			1	59.00	0.50	0.35	10.33		
			1	44.00	0.50	0.35	7.70		
							113.05	215.28	**24337.40**
	Basic Rate Rs.=	130.00							
	Add 6% A.W Rs. =	7.80							
	Sub Total =	137.80							
	8Km Lead, Loading and Unloading =(2*1.28*8)+57	77.48							
	Total Rate Rs. =	**215.28**							
2	KSRRB M2100-10. Providing and laying Plain cement concrete of mix 1:3:6 with OPC @ 220kgs, with crushed 40mm and down size graded granite metal coarse aggregates @0.89cum and fine aggregates @ 0.46cum, in foundation mechanically mixed, placed in foundation and compacted by vibration including curing for 14 days including cost of all materials, labour, HOM curing, form works, scaffolding and centering complete as per specifications. (P.No-222,I No-27.18)								
		Cum							
	Hegdenagar								
	For Culvert		4	8.50	2.00	0.15	10.20		
	For CC Road								
	Hegdenagar								
	1st cross		1	75.00	6.80	0.15	76.50		
	2nd cross		1	63.00	6.90	0.15	65.21		
	3rd cross		1	65.00	6.60	0.15	64.35		
	4th cross		1	70.00	7.00	0.15	73.50		
	5th cross		1	72.00	7.20	0.15	77.76		
	6th cross		1	75.00	6.00	0.15	67.50		
	7th cross		1	78.00	6.50	0.15	76.05		
	8th cross		1	81.00	7.10	0.15	86.27		
							597.33	5421.90	**3238663.53**
	Basic Rate Rs.=	5115.00							
	Add 6% A.W Rs. =	306.90							
	Total Rate Rs. =	**5421.90**							
3	KSRB 4-1.6 ; Providing and laying in position plain cement concrete of Mix 1:2:4 with OPC @ 240kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.878 cum and fine aggregtes @ 0.53cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation, plinth and cills, including cost of all materials, labour, HOM curing complete as per specifications. Specification No. KBS 4.1, 4.2. (P.No.13, I.No.4.6 of PW, P&IWTD SR 2018-19)								

Sl No	Description of work	Unit	No	Length m	Breadth m	Depth m	Quantity	Rate in Rs	Amount in Rs
		Cum							
	Hegdenagar								
	For Culvert Vent concrete		4	8.50	0.60	0.15	3.06		
	For Culvert Coping		8	8.50	0.45	0.10	3.06		
	Flagging course damaged reaches								
	Bed concrete		2	40.00	0.20	0.15	2.40		
			2	35.00	0.20	0.15	2.10		
			2	32.00	0.20	0.15	1.92		
			2	28.00	0.20	0.15	1.68		
			2	59.00	0.20	0.15	3.54		
			2	44.00	0.20	0.15	2.64		
	Flagging course damaged reaches								
	Coping concrete		2	40.00	0.15	0.075	0.90		
			2	35.00	0.15	0.075	0.79		
			2	32.00	0.15	0.075	0.72		
			2	28.00	0.15	0.075	0.63		
			2	59.00	0.15	0.075	1.33		
			2	44.00	0.15	0.075	0.99		
							25.76	5747.32	**148022.23**
	Basic Rate Rs.=	5422.00							
	Add 6% A.W Rs. =	325.32							
	Total Rate Rs. =	**5747.32**							
4	KSRB 5-14: Providing and constructing load bearing wall with solid concrete blocks having block density not less than 1800kg/m3 having a minimum average compressive strength of 4.00 N/mm2 confirming to IS 2185 (Part 1):2005 and constructed with CM 1:4, as per IS 2572:2005 including cost of all materials labour charges, scaffolding, curing, hire charges of machineries etc., complete as per specifications. - do - with solid concrete blocks of size 400x150x200mm (I No-5.26.2,P No-27,KPWD SR 2018-19)								
		Sqm							
	Hegdenagar								
	Flagging course damaged reaches								
			2	40.00		0.20	16.00		
			2	35.00		0.20	14.00		
			2	32.00		0.20	12.80		
			2	28.00		0.20	11.20		
			2	59.00		0.20	23.60		
			2	44.00		0.20	17.60		
							95.20	979.44	**93242.69**
	Basic Rate Rs.=	924.00							
	Add 6% A.W Rs. =	55.44							
	Total Rate Rs. =	**979.44**							
5	KSRB 5.2 : Providing and constructing granite / trap / basalt size stone masonry in foundation with cement mortar, stone hammered dressed in courses not less than 20 cms high, bond stones at 2m. apart in each course including cost of materials, labour, curing complete as per specifications. KBS 5.1.13 cement mortar 1:6 KBS 5.1.13 (I No-5.6,P No-25,KPWD SR 2018-19)								
		Cum							
	For Culvert Wall		8	8.50	0.45	0.80	24.48		
							24.48	4871.76	**119260.68**
	Basic Rate Rs.=	4596.00							
	Add 6% A.W Rs. =	275.76							
	Total Rate Rs. =	**4871.76**							

Sl No	Description of work	Unit	No	Length m	Breadth m	Depth m	Quantity	Rate in Rs	Amount in Rs
6	Providing and fixing RCC Precast cover slab of 100mm thick for drain in cement concrete M25 using graded granite jelly 20mm and down size with steel reinforcement, including form work, lift charges, curing and concrete finished surfaces on both sides etc, complete and as per drawing and the directions of Engineer in-charge. (Data Rate)								
	For drain cover slab	Sqm							
	Hegdenagar								
	missing/damaged slabs		124	0.90	0.60	--	66.96		
	Flagging course damaged reaches								
			1	40.00	0.90	--	36.00		
			1	35.00	0.90	--	31.50		
			1	32.00	0.90	--	28.80		
			1	28.00	0.90	--	25.20		
			1	59.00	0.90	--	53.10		
			1	44.00	0.90	--	39.60		
							281.16	2337.00	**657070.92**
7	Providing and Fixing pre cast covering Slab 250mm thick made out of M25 and jelly 20mm Down size with steel reinforcement including form work,curing,including cost of alll materials, labour,hire charges of machinery, loading, unloading, lead and lift,transportation etc ,complete.As per Engineer incharge. (Data Rate)								
	For Culvert Slabs	Sqm	4	8.50	1.50	--	51.00		
							51.00	5418.00	**276318.00**
8	KSRRB M200-24. Dismantling of cement concrete pavement by mechanical means using pneumatic tools, breaking to pieces not exceeding 0.02 cum in volume and stock piling at designated locations and disposal of dismantled materials stacking serviceable and unserviceable materials seperately complete as per specifications. Loading and unloading with 8km lead= (I No-18.47,P No-140,KPWD SR 2018-19)								
	For CC Road	Cum							
	Hegdenagar								
	1st cross		1	75.00	6.80	0.20	102.00		
	2nd cross		1	63.00	6.90	0.20	86.94		
	3rd cross		1	65.00	6.60	0.20	85.80		
	4th cross		1	70.00	7.00	0.20	98.00		
	5th cross		1	72.00	7.20	0.20	103.68		
	6th cross		1	75.00	6.00	0.20	90.00		
	7th cross		1	78.00	6.50	0.20	101.40		
	8th cross		1	81.00	7.10	0.20	115.02		
							782.84	973.42	**762032.11**
	Basic Rate Rs.=	899.00							
	Add 6% A.W Rs. =	53.94							
	8Km Lead, Loading and Unloading =(2*1.28*8)	20.48							
	Total Rate Rs. =	**973.42**							
9	Construction of granular sub-base Grading-V as Sub-base and drainage layer by providing coarse graded crushed stone aggregates of granite/ trap/basalt material, mixing in a mechanical mix plant at OMC, Carriage of mixed material to work site, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the 98 % proctor density, complete as per specifications.(I No-20.5,P No-153,KPWD SR 2018-19)								
	For CC Road Cut Portion	Cum							
	Hegdenagar								
	1st cross		2	75.00	1.00	0.20	30.00		
	2nd cross		2	63.00	1.00	0.20	25.20		
	3rd cross		2	65.00	1.00	0.20	26.00		

Sl No	Description of work	Unit	No	Length m	Breadth m	Depth m	Quantity	Rate in Rs	Amount in Rs
	4th cross		2	70.00	1.00	0.20	28.00		
	5th cross		2	72.00	1.00	0.20	28.80		
	6th cross		2	75.00	1.00	0.20	30.00		
	7th cross		2	78.00	1.00	0.20	31.20		
	8th cross		2	81.00	1.00	0.20	32.40		
							231.60	1994.92	**462023.47**
	Basic Rate Rs.=	1882.00							
	Add 6% A.W Rs. =	112.92							
	Total Rate Rs. =	**1994.92**							
10	Constructing un-reinforced, plain cement concrete for pavements using Grade concrete M30 over a prepared base with OPC coarse aggregate at 0.69 cum, fine aggregates at 0.46 cum,Coarse and fine aggregate conforming to IS:383-2016, with Superplastizer at 3 lts conforming to IS 9103-2008. mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the form work as per drawing). & Spreading the concrete with shovels, rackers compacted using needle, screed and plate vibrator and finished with floaters in a continuous operation including provision of contraction, expansion, construction and longitudinal joints,including groove cutting charges, joint filler, separation membrane of impermiable plastic sheet of 125 micron, sealant primer, joint sealant, admixtures as approved, curing compound.(P.No-176,I.No-22.6.1)								
	For CC Road	Cum							
	Hegdenagar								
	1st cross		1	75.00	6.80	0.15	76.50		
	2nd cross		1	63.00	6.90	0.15	65.21		
	3rd cross		1	65.00	6.60	0.15	64.35		
	4th cross		1	70.00	7.00	0.15	73.50		
	5th cross		1	72.00	7.20	0.15	77.76		
	6th cross		1	75.00	6.00	0.15	67.50		
	7th cross		1	78.00	6.50	0.15	76.05		
	8th cross		1	81.00	7.10	0.15	86.27		
							587.13	5210.96	**3059510.94**
	Basic Rate Rs.=	4916.00							
	Add 6% A.W Rs. =	294.96							
	Total Rate Rs. =	**5210.96**							
								Sub Total 1 Rs.	**8840481.98**
	Add GST @ 12%								**1060857.84**
	PMC Charges including GST								**98000.00**
								Sub Total 2 Rs.	**9999339.82**
	Miscellaneous & Rounding off								660.18
								Total Rs.	**10000000.00**

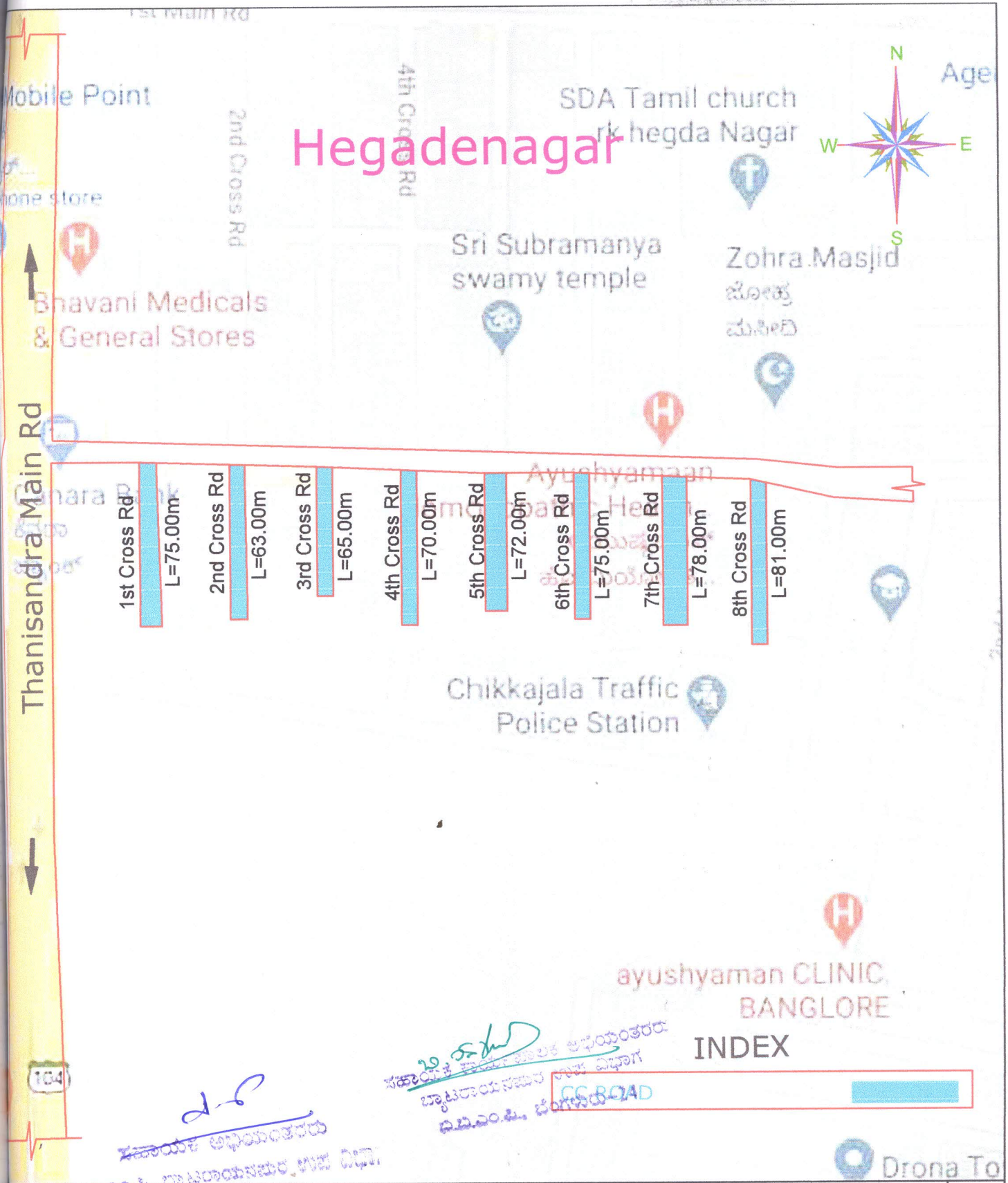
ADMINISTRATIVE APPROVAL
Accorded For Rs. 100.00 Lakhs only
Head of A/c P1878
Div. Ref. No. 31/20-21 Date 28/8/2020
AE 28/08
EE(BTP)

Sanctioned for Rs. 100.00 LAKH
HUNDRED LAKH ONLY
Under P1878
Job Code No. 006-4-000006 2021 dt 2/9/2020
Registered and obtained in enclosed memo No. 16 dated 2/9/2020
2/9/2020

CERTIFICATE:

1 The work spot has been inspected by me and the work is found to be necessary.
2 The estimate is prepared as per PW, P&IWTD S.R Bangalore circle for the year 2018-2019.
3 The Provisions made in the estimate are quite necessary and adequate.
4 The area comes with in the BBMP limits.

Assistant Engineer	Assistant Executive Engineer	Executive Engineer
Ward no 06	Byatarayanapura Sub Division	Byatarayanapura Division
BBMP	BBMP	BBMP



	CONSULTANTS Silicon Consulting Engineers #S1317, 4th CROSS BEL 2nd STAGE BHARATH NAGAR BANGALORE 560 091. E-mail siliconcivilengineers@gmail.com				Improvements to roads and drains at Hegadenagara surropunding area in ward NO:6 Bytarayanapura sub division